



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/614,755	07/07/2003	Kevin McQuistian	283359-00368	6137

3705 7590 07/17/2006

ECKERT SEAMANS CHERIN & MELLOTT
600 GRANT STREET
44TH FLOOR
PITTSBURGH, PA 15219

EXAMINER

JULES, FRANTZ F

ART UNIT	PAPER NUMBER
----------	--------------

3617

DATE MAILED: 07/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/614,755

Applicant(s)

MCQUISTIAN ET AL.

Examiner

Frantz F. Jules

Art Unit

3617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 April 2006.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

In view of the Appellants' request filed under 37 C.F.R.41.39(b)(1) requesting that prosecution of the application be reopen, prosecution of the application is hereby reopen.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1 lines 24-25, the phrase "the point detector connecting rod each being substantially straight and at least partially threaded" is confusing in light of the appellant's argument set forth on page 8 of the appeal brief regarding a ninety degree bent as there is nothing in the specification that defines the degree of bent in the point detector connecting rod.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 5-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over McQuistian (US 6,648,276 B1) in view of Hartung (US 4,637,579).

Art Unit: 3617

Claims 1, 5-6

McQuistian discloses a linkage structured to operatively extend between a railroad switch machine and a pair of movable rails of a railroad switch, the linkage comprising a pair of first rail lugs (A, D), see attached sketch; a pair of second rail lugs (B, C); one of the first rail lugs and one of the second rail lugs being structured to be operatively connected with one of the movable rails, the other of the first rail lugs and the other of the second rail lugs being structured to be operatively connected with the other of the movable rails; an operating spread rod (E) adjustably extending between the first rail lugs; an operating lug (F) structured to be connected with an operating rod of the railroad switch machine as shown in fig. 2; an operating connecting rod (G) adjustably extending between the one of the first rail lugs and the operating lug (F); a lock spread rod (28) adjustably extending between the second rail lugs as shown in fig. 1; a lock lug (8) coupling structured to be connected with a lock rod (30) of the railroad switch machine; a lock connecting rod (34) adjustably extending between the one of the second rail lugs and the lock lug (8); a point detector lug (12) structured to be connected with a point detector rod (40) of the railroad switch machine, a point detector connecting rod (44) adjustably extending between the one of the second rail lugs and the point detector lug; the operating spread rod, the operating connecting rod, the lock spread rod, the lock connecting rod each being substantially straight and at least partially threaded. The connecting rods being each independently adjustable.

McQuistian teaches all of the features as listed above but des not disclose a point detector connecting rod that is substantially straight and at least partially threaded. The

Art Unit: 3617

general concept of providing a point detector connecting rod that is substantially straight to a linkage structure of a switch machine is well known in the art as illustrated by Hartung which discloses the teaching of a point detector connecting rod (46) of the detector rod assembly (26) that is substantially straight and at least partially threaded in coupling relationship to a point detector, see col 3, lines 18-22. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify McQuistian to include the use of a point detector connecting rod that is substantially straight and at least partially threaded in his advantageous linkage structure of a switch machine as taught by Hartung in order to facilitate maintenance of the linkage structure.

5. Claims 7-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mcquistian (US 6,648,276 B1) in view of Hartung'579 and Schwiede (US 20020060273 A1).

Claims 7-10

McQuistian and Hartung teaches all the limitations of claims 7-10 except for switching assembly comprising a point detector connecting rod that is substantially straight and at least partially threaded in addition to a first hollow tie housing the operating connecting rod and lock rod and a second hollow tie housing the lock spread rod, the lock connecting rod, and the point detector connecting rod. The general concept of providing a point detector connecting rod that is substantially straight to a linkage structure of a switch machine is well known in the art as illustrated by Hartung which

Art Unit: 3617

discloses the teaching of a point detector connecting rod (26) that is substantially straight and at least partially threaded in coupling relationship to a point detector. Also, the general concept of providing "a first hollow tie housing an operating connecting rod and lock rod and a second hollow tie housing a lock spread rod, a lock connecting rod, and a point detector connecting rod" in a switching assembly is well known in the art as illustrated by Schwiede which disclose the teaching of "a first hollow tie (2a) housing an operating connecting rod and lock rod and a second hollow tie (2b) housing the lock spread rod, the lock connecting rod, and the point detector connecting rod" in a switching assembly, see col 1, lines 20-60. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify McQuistian to include the use of a point detector connecting rod that is substantially straight and at least partially threaded in his advantageous linkage structure of a switch machine as taught by Hartung in order to facilitate maintenance of the linkage structure. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify McQuistian to include the use of "a first hollow tie housing an operating connecting rod and lock rod and a second hollow tie housing a lock spread rod, a lock connecting rod, and a point detector connecting rod" in his advantageous switching assembly as taught by Schwiede in order to prevent movement at the switch location leading to deformation and damage of the switch parts in addition to difficulty and cost during standard tamping and maintenance of the rail bed.

Response to Argument

6. The Appellant's arguments filed 04/11/2006 have been fully considered but they are not persuasive.

A. Summary of the appellant's arguments

In the amendment, the appellant traversed the rejection of claims 1, 5-10 for the following reasons:

1. The 112nd indefiniteness rejection of claims should be lifted since "the Appellants do not believe that the use of a simple line drawing as an example makes the claims indefinite under 35 U.S.C. 112 2nd paragraph. That is, as the examiner did not find the original claims to be indefinite, and as the line drawing example was not a representation of the point detector connecting rod recited in the claims.
2. The prior art used in the combination rejection, Hartung, "does not disclose, teach, or suggest a point detector connecting rod that is substantially straight and at least partially threaded, as has been asserted by the Examiner". The appellants further stipulates that while "it is conceded that the connector rod (46) of the detector rod assembly (26) and the lock rod (40) of the lock rod assembly (24) both appears in Fig. 1 to be substantially straight in that plane ... it is respectfully submitted that such a view, by itself, cannot constitute a teaching that a longitudinal member is substantially straight" since, Fig. 4 clearly shows that the lock rod (40) includes at least a pair of bends formed therein". Therefore, the connector rod (46) of the detector connector rod assembly (26) of Hartung cannot be substantially straight and at least partially threaded. This argument is repeated on page 5 of the appellant's request to reopen prosecution.

3. The appellants argues on page 8 of the brief that "the characteristic of being "substantially straight" relates to the portion of a rod extending along, or adjacent to a common longitudinal axis relative to the total length of the rod and not to the degree of any "bends." For example, the lines in Figures 1 and 2 below represent a rod extending generally horizontally and which includes a vertical portion. That is, the angle of "bends" is ninety degrees. In Figure 1 the vertical portion is approximately one fifth of the total length. In Figure 2, the vertical portion is approximately one twentieth of the total length. As can be seen, the rod in Figure 2, despite having two right angles, is substantially straight relative to the rod in Figure 1". This argument is repeated on page 3 of the appellant's request to reopen prosecution.

4. There is no teaching, suggestion or motivation to combine the references in the rejection of claims 7-10. This argument is repeated on page 10 of the appellant's request to reopen prosecution.

B. Response to the appellant's arguments

1. In response to applicant's argument No. 1, it must be recognized that the indefiniteness rejection is based on the fact that no degree(s) of bent is expressed in the claim language or in the specification while applicant made argument on the record that various 90 degree bents on the rod meet the limitations of a substantially straight rod. It is clear that the Appellant argument on page 8 of the appeal brief dated 12/19/2005 constitutes description of "a substantially straight rod" matter introduced in the record which was not part of the record. Applicant's argument to remove the indefiniteness rejection of the claims reiterated on pages 1-2 of the appellant's request to reopen

Art Unit: 3617

prosecution is weak to overcome the indefiniteness rejection of the claims. Therefore, the indefiniteness rejection of claims 1-18 under 35 U.S.C. 112nd is proper.

2. In response to the appellant's argument number 1, it is factual that the point detector connecting rod (46) of the detector assembly (26) of the Hartung reference meets the claim limitation of a point detector connecting rod that is substantially straight and at least partially threaded. It should be reminded that independent claim 1 as well as claim 7 require the that the point detector connecting rod be ***substantially straight and at least partially threaded***. There is no requirement in the claim that the point detector connecting rod be straight and threaded as the appellant is arguing. It should be pointed out that the phrase "substantially straight" encompasses a very broad degree of variation, curve or bent that a member may have provided that it extends in a straight, longitudinal pattern. Thus, contrary to the appellant's contention, figs. 3-4 of the Hartung reference show a substantially straight lock rod (40) of the lock rod assembly (24) with threaded ends. The appellant's argument based on the fact that a couple of minor bends is shown in fig. 4 is weak to change the fact that the connecting rod (46) is substantially straight.

In addition, assuming for the sake of argument that the minor bent of the lock rod (40) shown in figs. 3-4 would exists in the connecting rod (46), Hartung would still meet the requirement of a substantially straight connecting rod which is partially threaded as the broad terminology of "substantially straight" does not remove the possibility of existence of minor bends in the rod.

Art Unit: 3617

Moreover, applicant's arguments regarding exhibit B and exhibit C is not understood since in relation to other components such as operating rod, lock spread rod, lock connecting rod or connector rod, the detector rod or bar would normally be offset and not be on the same plane as these components as shown in fig. 1 of the appellant's drawing for the switch machine to operate. The offset linkage or couplings known as exhibit B and Exhibit C identified in figs. 4 and 6 of the drawings are necessary for the operation of the machine.

3. In response to the appellant's argument No.2, it must be recognized that there is nothing in the specification that discloses the scope of bent of the connecting rod. The appellant's argument that the depicted figs. 1 and figs. 2, showing ninety degrees bent of a rod on page 8 of the appeal brief, meet the limitations of substantially straight rod constitute issue that was not disclosed in the specification which give rise to a new ground of 112 2nd rejection. There is nothing in the specification or in the independent claims 1 or 7 that defines the degree of bent in the connecting rod that the appellant is arguing on page 8 of the appeal brief or on pages 3-8 of the appellant request to reopen prosecution. Moreover, the appellant's argument that ninety degree bents in lines of figs. 1 and 2 meeting a substantially straight lines on page 8 only prove that the phrase "substantially straight" is broad in scope and is not limited to a straight line alone with zero degree bent.

4. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention

Art Unit: 3617

where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, an ordinarily skilled artisan would be motivated to include the teaching of a point detector connecting rod (46) that is substantially straight and at least partially threaded of Hartung and that of "a first hollow tie housing an operating connecting rod and lock rod and a second hollow tie housing a lock spread rod, a lock connecting rod, and a point detector connecting rod" of Schwiede into Mcquistian in order to achieve among others the benefit of preventing damage to the switch assembly during maintenance of the track bed.

Conclusion

7. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Art Unit: 3617

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frantz F. Jules whose telephone number is (571) 272-6681. The examiner can normally be reached on Monday-Thursday and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph S. Morano can be reached on (571) 272-6684. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Frantz F. Jules
Primary Examiner
Art Unit 3617

FFJ

June 17, 2006

FRANTZ F. JULES
PRIMARY EXAMINER

